COVID-19 ISSUE BRIEF

Analysis of STI Incidence in The City of Milwaukee during the COVID-19 Pandemic

Exploring the intersection of COVID-19 and STI trends in 2018, 2019 and 2020

BACKGROUND

There were more than 2.4 million combined cases of chlamydia, gonorrhea, and syphilis reported in the United States in 2018²—the highest number ever reported. Therefore, investing in STI programs is critical. However, due to the COVID-19 pandemic, public health resources have been reduced or suspended. For example, some methods of service delivery within the City of Milwaukee Health Department have been redirected, such as Disease Intervention Specialist (DIS) STI work. DIS professionals have long been on the front lines of STI care and prevention, and many have now pivoted their work to focus on COVID-19 recovery. The National Association of County and City Health Officials (NACCHO) postulated that STI cases would increase as people are unable to get tested and treated due to clinic closures and service reduction. In response, the concern is that the rollback in services could lead to increases of sexually transmitted infections like chlamydia, gonorrhea, and syphilis.

EXPLORING THE DATA

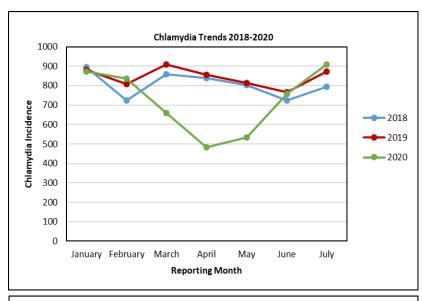


Figure 1. Chlamydia Trachomatis Incidence Trends 2018 - 2020

A significant decrease in *Chlamydia trachomatis* incidence in March, April and May 2020 may correspond with the COVID-19 pandemic response in which a shift in resources occurred, resulting in a decline in testing due to clinic closures, and social distancing caused by stay-at-home orders.

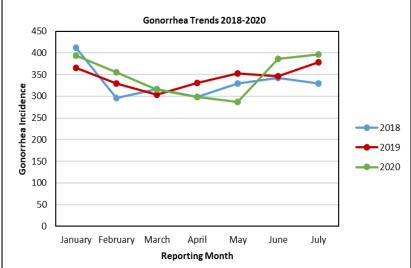


Figure 2. Gonorrhea Incidence Trends 2018 - 2020

A slight increase in gonorrhea incidence in June and July 2020 may correspond with stay-at-home orders being lifted, resulting in continued sexual activity and an increase in STI testing. Comprehensively, gonorrhea incidence has not changed.

*Disclaimer: Data only represents cases that were diagnosed and reported from January through the end of July for 2018, 2019, and 2020.



EXPLORING THE DATA, Continued —STI Trends

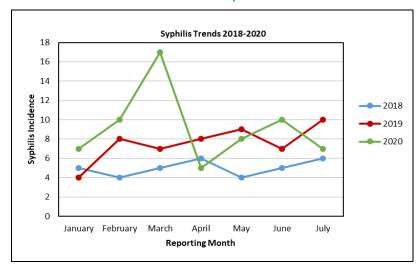


Figure 3. Syphilis Incidence Trends 2018 - 2020

Syphilis incidence increased into 2020, with reported cases in January, February and March surpassing 2019 and 2018 reported cases. The observed decline in April 2020 may correspond with the COVID-19 pandemic response in which a shift in resources occurred, resulting in a decline in testing due to clinic closures, and social distancing caused by stay-at-home orders.

Disclaimer: Data only represents cases that were diagnosed and reported from January through the end of July for 2018, 2019, and 2020.

SUMMARY AND RECOMMENDATIONS

In total, 5,055 cases of chlamydia were reported January through July 2020—reflecting the lowest number of cases in the past three years compared to January through July in 2019 (5,906) and 2018 (5,640). The significant decrease in chlamydia cases identified in March (315), April (298) and May (287) of 2020 may potentially be attributed to the COVID-19 pandemic response in which a shift in resources occurred, resulting in a decline in testing due to clinic closures, and social distancing caused by stay-at-home orders. 386 cases of gonorrhea were reported in June of 2020, while 397 cases of gonorrhea were reported in July of 2020. The slight increase in gonorrhea incidence may be due to resumed sexual activity and/or an increase in STI testing once stay-at-home orders were lifted. Syphilis incidence increased into 2020 with 64 reported cases, surpassing the number of syphilis cases reported January through July in 2019 (53) and 2018 (35). Ultimately, The City of Milwaukee has not experienced a significant change in the number of sexually transmitted infections reported between January and July 2020 in comparison to previous years.

The City of Milwaukee Health Department has actively worked to keep health centers and clinics open during the COVID-19 pandemic as a commitment to public health and to reduce the burden placed on hospitals. Keenan Health Center may help explain the similarity in STI trends over the years. The COVID-19 pandemic had no significant impact on clinic visits at Keenan Health Center. Clinic visit trends between January and July 2018 (2,018) and 2019 (2,220) are relative to clinic visits in 2020 (1980) between January and July. While Keenan Health Center does not represent the entire STI clinic landscape in the City of Milwaukee, it does help us understand the potential prioritization other STI clinics may have practiced with respect to the COVID-19 pandemic and clinic services. In terms of the rising rates of syphilis, Milwaukee Health Department staff who have not had to pivot their work in response to the COVID-19 pandemic continue to play a critical role in maintaining services for syphilis prevention. STI case investigation and contact tracing remain a top priority—this allows staff to link individuals with syphilis to treatment and care. STI clinics like Keenan will continue to function as a crucial access point for STI intervention in the community. Clinical and DIS staff have been working tirelessly to support COVID-19 efforts while keeping essential STI services in place—this highlights the importance of continued support and adequate resources for clinical and DIS staff.

The Center for Disease Control and Prevention (CDC) has provided recommendations for STI clinics and prevention programs regarding continued care and prevention when clinic-based services and in-person contact is limited. Recommendations include implementing a phone or telemedicine-based approach and establishing collaborative partnerships with organizations that can offer additional support.³ STI clinics around the country have also established or expanded at home self-collection testing (AHSC) as an alternative to in-person STI testing. Supporting STI screening by relying on AHSC presents many opportunities although there are challenges such as higher costs, accuracy issues, and regulatory barriers.⁵ As part of these trends, inequities impacted by historic disinvestment in Indigenous, Latinx, Black and African American communities¹ and other structures of racism that continue to impact our society today should be considered. Many factors including social, cultural and socioeconomical circumstances such as discrimination, fear and distrust of medical institutions, health care access, and cuts in essential programs contribute to the resurgence of STIs. The COVID-19 pandemic may have worsened several of these factors.⁶ It remains to be determined whether COVID-19 will have long term effects on STI incidence.



CITATIONS

- 1. American Medical Association. (2020). COVID-19 FAQs: Health equity in a pandemic. https://www.ama-assn.org/delivering-care/health-equity/covid-19-faqs-health-equity-pandemic
- 2. Center for Disease Control and Prevention. (2019, July 30). 2018 Sexually Transmitted Diseases Surveillance. https://www.cdc.gov/std/stats18/toc.htm
- 3. Center for Disease Control and Prevention. (2020). Guidance and Resources During Disruption of STD Clinical Services. https://www.cdc.gov/std/prevention/disruptionGuidance.htm
- 4. Kelley, K. (2020, April 10). LHD HIV, STI, and Hepatitis Programs Respond and Adapt to COVID-19. https://www.naccho.org/blog/articles/lhd-hiv-sti-and-hepatitis-programs-respond-and-adapt-to-covid-19
- 5. National Coalition of STD Directors. (2020). COVID-19 and the State of the STD Field. https://www.ncsddc.org/wp-content/uploads/2020/05/STD-Field.Survey-Report.Final .5.13.20.pdf
- Stulpin, C. (2020, September 15). Pandemic-related declines in testing, 'sexual distancing' cause dip in reported STDs.
 Retrieved from https://www.healio.com/news/infectious-disease/20200915/pandemicrelated-declines-in-testing-sexual-distancing-cause-dip-in-reported-stds
- 7. Toussaint, K. (2020, April 22). These disease investigation specialists usually track down STDs. Now they're doing COVID-19 contact tracing. https://www.fastcompany.com/90492735/these-disease-investigation-specialists-usually-track-down-stds-now-theyre-doing-covid-19-contact-tracing
- 8. Wisconsin Department of Health Services. (2019, May). Sexually Transmitted Disease in Wisconsin 2018. https://www.dhs.wisconsin.gov/publications/p00415-2018-milw.pdf
- 9. Wisconsin Department of Health Services. (2019, November 27). Wisconsin STD (Sexually Transmitted Disease) Surveillance Data, PowerPoint. https://www.dhs.wisconsin.gov/library/p-00415-ppt.htm

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